

POULTRY FACTS

SUITABLE SHELTER FOR HENS

House of Appropriate Size, With Nests, Roosts and Feeding Appliances Is Needed.

(Prepared by the United States Department of Agriculture.)

Every flock of hens needs a suitable shelter—a coop or house of appropriate size, furnished with roosts, nests and appliances for feeding and watering. A flock that is to be used for breeding should also have a yard where the birds can exercise on the ground and in the open air. Hens kept only for eggs for the table may be confined to their house continuously for as long a time as ordinary hens are profitable layers. It is better to give them an outdoor run, but when space is limited it can be dispensed with.

Small flocks need a little more floor space per bird than large flocks, and birds confined constantly to the house should have a little more floor space per bird than others. A coop for six hens should allow five or six square feet of floor space for each; a house for twenty to thirty hens, three or four square feet to each. Yards are usually planned to give not less than 20 square feet of land per hen.

Small coops which can be cleaned without entering them may be built only three or four feet high. This height is most comfortable for the hens. Coops for flocks of more than six or eight birds must be of such height that a grown person can move about in them. In a low coop the same opening will answer for door and window. In high coops with larger wall



A Boy's Backyard Poultry House, Built by Himself.

surfaces a full-sized door and one or more windows are needed.

Roosts are commonly made of small scantling or narrow strips of board, about eight or ten inches length of roost being allowed to each fowl. In small, low coops the roosts should be placed about twelve to fifteen inches from the floor. In larger coops wide boards, to catch the droppings of the birds, are generally used under the roosts, the droppings board being from twenty to thirty inches from the floor and the roost a few inches above the droppings board.

The simplest form of nest is a box a little over a foot square and not less than five or six inches deep. When space is limited the nests should be attached to the wall, the bottom of the nest being a foot or more from the floor. For flocks of five or six hens two nests are needed; for larger flocks one nest for each four or five hens.

The feeding utensils required are. Hoppers for dry mash, trough for table scraps or moist mash, small hoppers for shell and grit, and drinking pans or fountains. For flocks containing not more than 30 birds one of each kind of utensil, if of appropriate size is enough.

FAVOR SPREAD OF DISEASES

Damp, Poor Ventilated Quarters Encourage Such Ailments as Roup.

(Prepared by the United States Department of Agriculture.)

Cold, damp, poorly lighted and ventilated poultry quarters favor the spread of such diseases as roup. Such contagious diseases as these are difficult and sometimes impossible to control unless given attention in the early stages. Whenever preventative measures fail, separate sick birds from the flock as soon as there is evidence of disease, and then consult expert advice to effect a cure.

MANY ERRORS OF BEGINNERS

Difficult Problems Will Be Presented Before Success in Any Large Degree Is Attained.

(Prepared by the United States Department of Agriculture.)

Beginners in the poultry business will probably make many mistakes and difficult problems will be presented for solution before success in any large measure will be attained. As soon as it is found to be a paying investment, more capital may be put into the plant.

Turkey Raising on Farm. Turkey raising, as ordinarily engaged in, is a side line upon the general farm. For those persons who are favorably situated for raising turkeys, a more profitable side line can hardly be found. Plenty of range is essential to success.

Bronze Most Popular. The most widely known turkey is the Bronze, after which come the White Holland, the Bourbon Red, the Black, the Narragansett and the Blue.

ANOTHER WORLD'S RECORD FOR BUTTER PRODUCTION BROKEN BY HOLSTEIN COW



FAIRVIEW KORNDYKE MATA.

Records for butter production are being broken thick and fast by Holstein cows these days. Fairview Korndyke Mata has just broken the world's record by producing in 30 days the enormous amount of 185.31 pounds of butter from 3,216 pounds of milk—an average of 6.17 pounds per day for 30 days.

The best previous record was held by the purebred Holstein cow, Ormsby Jane Segis Auggie, with 183.11 pounds in 30 days to her credit.

Fairview Korndyke Mata recently completed a seven-day test, winning

laurels as the twenty-third Holstein to join the list of 40-pound cows with the production of 46.71 pounds of butter in the week—the second highest record for the week. Her test was continued for the month with the result that she is now one of the world's record holders. Her sire is Pontiac Korndyke; her dam is Princess Matador. She is owned by Oliver Cabana, Jr., of Elma Center, N. Y.

Fairview Korndyke Mata is six years and six months old, so she has many more years of usefulness ahead of her.

FARM LABOR IS BIG PROBLEM THIS YEAR

War Emergency Calls for Greatest Efforts to Produce Food.

Both Country and City People Must Sacrifice Comfort to Furnish Power to Cultivate and Harvest Necessary Crops.

(Prepared by the United States Department of Agriculture.)

In a statement issued by Clarence Owsley, assistant secretary of agriculture, attention is called to the fact that both country and city people must sacrifice something of their comfort to furnish the necessary man power to cultivate and harvest crops necessary this year to carry on the war. That part of the statement which deals directly with farm labor and what the department of agriculture is doing to solve the problem, follows:

The principal difficulty in farming operations for 1918 is the problem of labor. That is serious, but it is not insuperable. The department of agriculture has farm-labor offices in nearly all of the states working in co-operation with the agricultural colleges, the county agents and other state activities, and the department of labor has employment offices in nearly all of the centers of population. These two departments together are enabled to contribute much to the solution of the problem by furnishing information and by shifting labor from neighborhood to neighborhood as the seasonal demand passes, and generally by bringing together the laborer and the employer. But when all has been done that may be done by these departments or by any other governmental agency, much will remain to be done by the states and communities, especially by the cities, for there is not enough labor seeking employment to supply the farms for cultivation and harvesting. For years the cities with their great fortunes and bright lights have been drawing young men from the farms. The war has merely precipitated a drift that sooner or later would have caused more or less of a food crisis. In peace times that is a matter that might well be left to readjust itself through such reduced production and consequent high prices as would make farming more profitable and attract men to the industry. But in the war emergency we must have food at all costs, and since there is no way of getting it without labor, and since labor is lacking, the cities must sacrifice something and harvest the crops. In many towns and cities last year the business men closed their establishments or spared numbers of their employees to help the farmers. In a few places already business men are taking surveys and are making pledges to furnish labor which has farm experience, to the adjoining communities as may be needed. The same methods must be put into practice in every town and city adjacent to a farming region. The men of the cities must be brought to understand the vital importance of agriculture. Many of them have sneered at it or have regarded it with indifference. Now they must lend it much of their thought and their effort. They should understand that the United States is going to furnish food to the armies and the civil population behind them, and they may depend upon it that the farmers will feed themselves. It behooves the cities therefore to take some thought of their own sustenance by readjusting their activities. There is hardly a business or an industry in the United States that cannot spare temporarily for the cultivation and harvesting seasons a considerable part of its man power, or even close, say, for three to fifteen days during the period as this

local need appears. In many cases women can take the places of men for the lighter commercial and industrial tasks so that the men who have farm experience may be available for farm needs. In many cases women can do light work on the farm, such as dairying, cultivating vegetables and gathering fruit. The details must be worked out by each community. It is not possible to devise a general system, because conditions vary on every farm and in each neighborhood.

In many of the industrial centers wages are so high that a large number of men are content to work only a part of the time. Either by public sentiment or industrial regulations—if need be by vagrancy laws—there must be a full utilization of man power. It is not possible for the national government to compel or even to direct such readjustments. There is not wisdom enough in this congress or in any congress that could be assembled to solve all these local and regional problems. States, communities and individuals of influence must take responsibility. Washington cannot create labor and should not compel employment. Local initiative and local responsibility must be exercised to the fullest extent.

The farmers will do their full duty in planting. The governmental agencies will do all that they can do and we may reasonably expect a normal season. If the people of the communities, especially of the cities, will assume their part of the burden, there need be no doubt of the result, but if the cities persist in plunging for profit and in enjoying their ease, expecting the government and the farmers to work miracles, then those who are neither fighters nor producers may suffer some privation.

CIVILIANS AID HARVEST

If soldiers are willing to serve in the trenches, to dig ditches, build railroads and risk their lives, many civilians can well afford to spare a part of their time to serve in the furrows and in the harvest fields.—Secretary of Agriculture.

WORK GARDENS ALL SUMMER

Plan to Have Succession of Crops as Many Plantings May Be Made Before Autumn.

(Prepared by the United States Department of Agriculture.)

Garden planting should not stop when the seed and plants are set out in the ground, but other crops should be planted during the summer—as many plantings as can be matured before the killing frosts in the fall—so as to have a succession of vegetables.

The gardener who is content with but one crop does not get the maximum benefit from his land and labor.

The gardener who is uncertain as to when Jack Frost is likely to appear in the fall, and as to how far in advance of his appearance the last crops should be planted, can find information on these points in "The Farm Garden in the North," Farmers' Bulletin 937, issued for free distribution by the United States department of agriculture.

This bulletin, which is offered to city gardeners as well as to those in the country and which contains information of equal value to both, has a zone map of the United States based on the average dates of the first killing frost in autumn. By referring to the map, the approximate latest safe date for planting any crop in any of the various zones may be determined. The bulletin also contains a table giving the latest safe dates for planting vegetable seeds in the open in the Northern states and telling the period necessary for maturity of the various crops.

DAIRY

"STARTERS" TO RIPEN CREAM

Technical Work Should Not Be Undertaken Unless Butter Is Made on Commercial Scale.

(Prepared by the United States Department of Agriculture.)

In creameries it is customary to control to some extent the ripening of cream by means of "starters," which are pure cultures of lactic-acid-producing bacteria grown in pasteurized milk. The making of starters is technical work that should not be undertaken unless butter is made on a commercial scale. If the milk and cream are produced under proper conditions, there is no need for using starters. If handled under those conditions and protected from contamination, cream will develop the desired flavor when allowed to ripen or sour naturally at the proper temperatures.

When butter is made on a commercial scale, it may be advisable to control the ripening and thus make a product that is more uniform from week to week.

Commercial cultures for starter making may be obtained from culture manufacturers and from dairy supply houses. Directions for using accompany each package and should be followed carefully.

A natural or homemade starter may be made as follows:

1. Clean thoroughly and boil for five minutes three pint fruit jars and tops. After boiling keep the jars covered to prevent the entrance of bacteria.

2. Take a pint sample of milk freshly drawn from each of three cows, place in the jars, cover, cool to 75 degrees Fahrenheit, and keep at that temperature until curdling occurs.

3. Curdling, or coagulation, should take place in about 24 hours. An ideal curd should be firm, smooth, marble-like, free from holes or gas bubbles, and should show little or no separation of the whey. It should have a clean, sharp, sour or acid flavor.

4. Select the sample that most closely meets those conditions and propagate it, discarding the others. The selected sample is propagated as follows:

(a) Clean thoroughly and boil for five minutes a quart jar, the top, and a teaspoon.

(b) Fill the jar with freshly drawn milk, cover loosely, heat slowly to boiling, and pasteurize by boiling gently for 30 minutes.

(c) Cool the milk to 75 degrees Fahrenheit and add a teaspoonful of curdled milk described in section 3 and set away to curdle at that temperature.

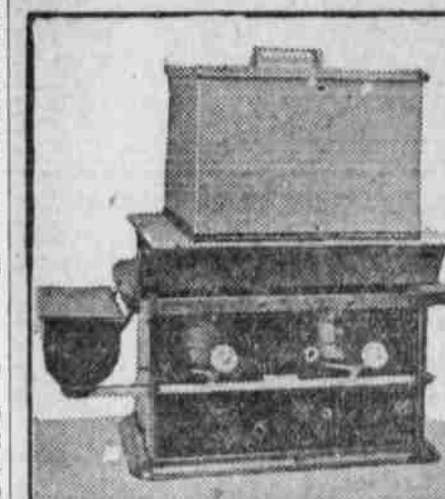
(d) Propagate the starter from day to day in the same manner described in a, b and c. The starter described in c is the one to use for ripening the cream, and should be added in such quantities as to be one-tenth to one-fifth of the cream to be churned.

MILK STERILIZER IS FAVORED

Cheap and Effective Device That Has Important Bearing on High Grade Product.

(Prepared by the United States Department of Agriculture.)

The simple steam sterilizer for dairy utensils developed by the United States department of agriculture is meeting with great favor from municipal milk and health authorities. The device has been demonstrated by the health authorities in 172 cities and 96 officials have written to the department.



Homemade Sterilizer.

ment praising the value of the device in improving the local milk supply. Thirty-seven health officers report that the device is being made locally for use by dairymen. Several dairy milk inspectors stated positively that the local milk supply has been improved through the introduction of this device.

During the past season the sterilizer was demonstrated to more than 6,000 farmers and was made the subject of a campaign in favor of clean milk utensils that reached thousands of dairy farmers. Twenty-six of the state agricultural colleges secured devices to demonstrate to their short-course students. The device is now being made commercially and can be purchased complete with oil stove for \$8.50; or the sterilizer portion alone, which provides apparatus for sterilizing pans, pails, separator parts, small utensils and strainer cloth, can be purchased for \$5.50. Directions for making the home sterilizer are given in Farmer's Bulletin 748, which will be sent free on application to the department.

FRICK 12-25 KEROSENE TRACTOR

A Dependable Tractor by a Dependable Firm

The Frick is uniquely practical in design with maximum power, light in weight, consistent with durability. Particularly adapted to the needs of the Farmer who is looking for the Tractor that will provide the widest range of service with the smallest operating and upkeep expense. The Frick is suitable in power, weight and design to Plow, Harrow, Haul and Drive the Thresher, Saw Mill, Corn Sheller, Feed Cutter, or other Farm Machinery.

Successfully Draws Three 14-Inch Bottom Flows

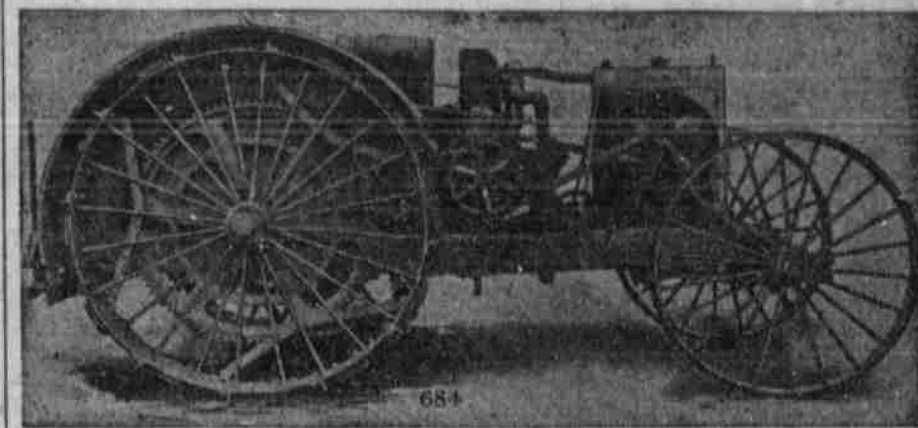
Self Steering—Travels in furrow. Operator has unobstructed view ahead. Fuel—Kerosene or gasoline, kerosene preferred. Belt Pulley is covered and connected direct to Motor Crank by Friction Clutch—no power lost by bevel or indirect gearing.

Excels All Others in Simplicity, Durability and Accessibility

Supplies and service within phone call. Ask for our Tractor and Individual Thresher Bulletin.

MORRIS MOTOR AND TRACTOR CO.

Distributors 1029 P St., Lincoln, Neb.



PATRIOTIC Pocket Piece

A Memento of the World's Greatest of All Wars

Something to carry into the years to come when the great events of today have passed into history of tomorrow. A memento of this eventful period will be treasured by your children's children. It will show that your moral support was to the great cause of LIBERTY and JUSTICE. Made of white metal, beautifully designed into a convenient pocket piece. Send 25 cents to

THE LIBERTY NOVELTY MFG. CO.
519 Free Press Bldg., Detroit, Mich., U. S. A.

Sapolio doing its work. Scouring for U.S. Marine Corps recruits.

Join Now!

APPLY AT ANY POST OFFICE for SERVICE UNDER THIS EMBLEM

UNITED STATES AND SCIENCE

Activities of Entire World Centered on This Country and Interest Expected to Continue.

"Very few people realize that the scientific activities of the world are centering in the United States, and that they will doubtless continue to do so if material means be given to keep up the work," said Father Charles B. Moulliner, regent of the Marquette university school of medicine, in a recent interview in the Marquette Tribune.

"South America, for instance, is now looking to us for scientific leadership. China and Japan are once more turning to us. Great attention is being paid to medicine in South America. Buenos Aires alone having a medical school with 5,000 students. The Wistar institute of anatomy, in Philadelphia, is one of the most decisive factors in turning the attention of the scientific world to the United States. This institute has an endowment which makes it possible to give large service to mankind. Just now it is printing copious translated extracts from the medical journals published and sending them to China and Japan. Duplicates of the journals are also sent to South America."

"A great deal of research work is being done by this school in the direction of discovering dyes. Certain chemical dyes, formerly produced only by Gruebler of Germany, are required in technical work. Wistar is now producing dyes the equal of Gruebler's. "It may be interesting to know that much of this research work has been done by a young Philadelphian who delved into chemistry for his own pleasure and experimented in his private laboratory. Wistar hearing of some remarkable discoveries made by him immediately called him to the institute, placing its facilities at his disposal for this important work."

Always proud to show white clothes. Red Cross Ball Blue does make them white. All grocers. Adv.

"Conscription of Wealth."

It is the simple fact, so thinks the Monetary Times of Toronto, that the idea of conscription or confiscation of wealth must be abandoned upon this continent. "The great need of the western world, and all countries coming within the scope of western civilization, will be a fund of investment capital at the close of the war."

Ford Owners Attention!

A POSITIVE CURE FOR OIL PUMPS

Ever-Tyte Ford

SPECIAL PISTON RINGS

stop all carbon deposits and fouled spark plugs. Increase compression and speed wonderfully.

PAY FOR THEMSELVES IN SIX MONTHS BY SAVING IN GASOLINE AND OIL. Guaranteed to do the work of your money back.

\$8.00 PER SET OF 4 RINGS

EVER-TYTE made in all sizes for auto, tractor and gasoline engines. Ask your nearest dealer or write THE EVER-TIGHT PISTON RING COMPANY, Dept. 1, ST. LOUIS, MO.

W. N. U., OMAHA, NO. 25-1918.

GAINED 55 POUNDS

Doan's Kidney Pills Effected Wonderful Recovery After Other Medicines Had Failed.

"I don't believe I would be alive to give this testimony if it weren't for Doan's Kidney Pills," says Mrs. Julia A. Thomas, 1123 A. Missouri Ave., East St. Louis, Ill. "I was in a serious condition with kidney trouble; my feet and ankles were terribly swollen and the kidney secretions caused agony in passage. I had terrible rheumatic pains and often got so dizzy I dared not walk for fear of falling. I felt as if I would go frantic. I grew weak as a baby and often had to grasp something to keep from falling. My nerves were all unstrung and the least noise startled me. Nothing benefited me and I was discouraged. A neighbor happened to recommend Doan's Kidney Pills and I began using them. The swellings and pains were soon eased up and it was but a short time before my kidneys were in good shape again. They have never bothered me since nor have I had any backache or other kidney trouble. I have gained 55 pounds since I was cured and can do all my own work without suffering."

"Sworn to before me."

FRANK W. CLOVER, Notary Public.

Get Doan's at Any Store, 60c a Box

DOAN'S KIDNEY PILLS

FOSTER-MILBURN CO., BUFFALO, N. Y.